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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,428	12/20/2004	Katrin Gisselhalt	1511-1036	6764
466 7590 08/01/2008 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER GILLESPIE, BENJAMIN	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 08/01/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/518,428

**Applicant(s)**

GISSELFALT, KATRIN

**Examiner**

BENJAMIN J. GILLESPIE

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/550e)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

*Note*

1. In view of applicants remarks filed 6/30/2008 in the pre-appeal request, the finality of the office action mailed 2/29/2008 has been removed, and prosecution as been reopened.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flodin ('441). Flodin discloses linear polyurethane comprising polyisocyanates, polyester diol, diamine chain extenders, and chain terminating ethanolamine (Col 1 lines 64-67, col 2 lines 1-7, 11-13, 28-31, and 60). Regarding applicant's methodology of claim 1, the urethane prepolymer is produced by adding the polyester diol drop wise to the aromatic diisocyanate, wherein "drop wise" is taken to satisfy the language "sufficiently slow rate," and the ratio of NCO:OH may be as large as 4.5:1 (Col 4 lines 40-42; col 5 lines 35-38; example 5). Furthermore, patentee explains the resulting polyurethane is useful in implants, fibers, and woven mats, which are porous (Example 1).
3. However, the examiner notes that the reaction temperature of example 5 is between 70-80°C, and therefore does not satisfy the claimed temperature range. Nevertheless, Flodin explains on column 4 lines 40-43 that when the prepolymer is created in the absence of catalyst, the reaction temperature may be as low as 60°C; therefore it would have been obvious to synthesize the prepolymer of example 5 at 60°C since it has been established that minimum

reaction temperatures are not limited to 70°C. With this understanding, one of ordinary skill would reasonably expect the resulting polyurethane of Flodin to share the same backbone architecture and mechanical properties as claimed by applicants since both are produced by analogous reactants, stoichiometric ranges, and a similar methodology

***Response to Arguments***

4. Applicant's arguments filed 6/30/2008 with respect to the rejection of claims 1-20 under 35 U.S.C. 102(b) have been fully considered and are persuasive; the rejection has been removed.
5. Applicant's arguments filed 6/30/2008 with respect to the rejection of claims 1-20 under 35 U.S.C. 103(a) have been fully considered and but are not persuasive. Applicants' argue that the claimed invention is not rendered obvious by Flodin because patentees fail to teach an NCO:OH ratio greater than 2:1, and the prepolymer reaction is only conducted in the absence of catalyst at temperatures ranging from 70-90°C, i.e. the temperature range of Flodin does not overlap applicants' 50-60°C range; the examiner disagrees.
6. Applicants have appeared to missed the disclosure on column 4 lines 40-43 which clearly teaches that the prepolymer may be formed in the **absence** of catalyst at a temperature as low as 60°C (emphasis added). Furthermore, aforementioned example 5 also clearly teaches an NCO:OH ratio that is "greater than 2:1"; therefore the examiner maintains the position that Flodin render obvious the claimed invention.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN J. GILLESPIE whose telephone number is (571)272-2472. The examiner can normally be reached on 8am-5:30pm. If attempts to reach the

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examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rabon Sergent/  
Primary Examiner, Art Unit 1796

B. Gillespie